

Claims

1. A method for providing a user interface for an smart watch device, the smart watch device having a graphical user interface including a display and at least one input element, the method comprising:

5 displaying an information screen in a display foreground;

displaying at least one control image in a display background, the display background appearing behind the display foreground, the control image indicating a task to be performed
10 by the electronic device when the input element is activated; and associating the control image with the input element.

2. The method of claim 1, further comprising receiving an activation signal from the input element.

3. The method of claim 2, further comprising performing the task associated with the input element after the activation signal is received.

4. The method of claim 1, wherein the act of associating further comprises positioning the virtual control image proximate the input element.

5. A user interface for an electronic device having a display and at least one input element, the user interface comprising:

5 displaying control images and information images in a same display area in overlaid fashion, the control images being associated with an input element; and

receiving an activation signal from the input element indicating a stroke of the input element and thereby activation of a control represented by the control image.

6. The user interface of claim 5 wherein each input element has multiple strokes and each control image is associated with one of the multiple strokes of the input element.

7. The user interface of claim 5 wherein the information image is overlaid on the control image so that the information image is in the foreground and the control image is in the background.

8. The user interface of claim 5 wherein the control image is overlaid on the information image so that the control image is in the foreground and the information image is in the background.

9. The user interface of claim 5 wherein each control image is associated with a control task to be executed after an activation signal is received.

10. A method for inputting control signals to an electronic device, the electronic device having a graphical user interface including a display and at least one input element, the method comprising:

generating an information screen;
generating a control screen having at least one control image;
associating the control image with the input element;
combining the information screen and the control screen into a composite screen such that the information screen and the control screen appear in an overlapping fashion; and
displaying the composite screen in the display.

11. The method of claim 10, wherein the associating operation includes positioning the control image proximate the input element.

12. The method of claim 10, wherein the combining operation includes blending the information screen and the control screen such that the information screen appears in front of the control screen.

13. The method of claim 10, wherein the generating the control screen operation includes indicating a task to be performed by the electronic device when the input element is activated.

14. The method of claim 10, wherein the combining operation includes blending the information screen and the control screen such that the control screen appears in front of the information screen.

15. The method of claim 10, further comprising the operation of receiving an activation signal from the input element.

16. The method of claim 15, further comprising the operation of performing the task associated with the input element after the activation signal is received.

17. An interface system for inputting control signals into an electronic device, the interface system comprising:

at least one input element adapted to provide an activation signal when the input element is activated;

an application module coupled with the input element, the application module performing at least one task in response to the activation signal;

an information module coupled with the application module, the information module receiving at least one information image from the application module;

a control module coupled with the application module, the control module receiving at least one control image from the application module, the control image being associated with the input element;

15 a rendering module coupled with the information module and the control module, the rendering module creating a display image, wherein the display image formats the content image and control image such that the content image appears in front of the control image; and

20 a display element coupled with the rendering module, the display element displaying the display image.

18. The interface system of claim 17, wherein the control module includes at least one control Application Programming

Interface adapted to receive a plurality of control call parameters from the application module.

19. The interface system of claim 18, wherein the information module includes at least one content Application Programming Interface adapted to receive a plurality of content call parameters from the application module.

20. A computer program product readable by a computing system and encoding a computer program of instructions for executing a computer process for inputting control signals to an electronic device, the electronic device having a graphical user interface including a display and at least one input element, the
5 computer process comprising:

generating an information screen;
generating a control screen having at least one control
image;
associating the control image with the input element;
combining the information screen and the control screen
into a composite screen such that the information screen and the
control screen appear in an overlapping fashion; and
displaying the composite screen in the display.

21. The computer program product of claim 20, wherein the act of combining in the computer process comprises blending the information screen and the control screen such that the information screen appears in front of the control screen.

22. The computer program product of claim 20, wherein the act of generating the control screen in the computer process further comprises indicating a task to be performed by the electronic device when the input element is activated.

23. The computer program product of claim 20, wherein the act of combining in the computer process comprises blending the information screen and the control screen such that the control screen appears in front of the information screen.

24. The computer program product of claim 20 wherein the computer process further comprises receiving an activation signal from the input element.

25. The computer program product of claim 24 wherein the computer process further comprises performing the task associated with the input element after the activation signal is received.

26. A method for inputting characters to an electronic device, the electronic device having a graphical user interface including a display and a plurality of input elements, the method comprising:

5 displaying an information screen in a display foreground;

 displaying a control screen in a display background, the display background appearing behind the display foreground;

 loading a character set, the character set including a plurality of individual characters;

 dividing the character set into character subsets; representing the character subsets in the control screen;

 receiving a selection signal for one of the character subsets;

 narrowing the range of the selectable character set to the selected character subset; and

 repeating the dividing, representing, receiving, and narrowing operations until a selection of one of the individual characters is made.

27. The method of claim 26, further comprising the operation of combining the information screen and the control screen into a composite screen such that the information screen and the control screen appear in an overlapping fashion.

28. The method of claim 26, wherein the representing operation includes the operation of providing control images for the character subsets.

29. The method of claim 28, further including the operation of associating the control images with the input elements.

30. The method of claim 29, wherein the associating operation includes positioning the control images proximate the input elements.

31. The method of claim 26, further including the operation of generating a selection signal from the input elements.

32. A computer program product readable by a computing system and encoding a computer program of instructions for executing a computer process for inputting control signals to an electronic device, the electronic device having a graphical user interface including a display and a plurality of input elements, the computer process comprising:

displaying an information screen in a display foreground;

displaying a control screen in a display background, the display background appearing behind the display foreground;

loading a character set, the character set including a plurality of individual characters;

dividing the character set into character subsets;

representing the character subsets in the control screen;

receiving a selection signal for one of the character subsets;

narrowing the range of the selectable character set to the selected character subset; and

repeating the dividing, representing, receiving, and narrowing operations until a selection of one of the individual characters is made.